

In the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A pulse wave measuring apparatus for measuring a pulse wave when pressed against a living body, comprising:

a substrate [[(1)]] having ~~pressure sensing means (3)~~ a pressure sensor on a main surface; and

~~(1), the pulse wave measuring apparatus serving to measure a pulse wave by pressing said substrate (1) against a living body;~~

wherein a wall surface [[(20a)]] of said protection member [[(12)]] forming said accommodation space is arranged such that an air chamber [[(20)]] is interposed between said wall surface and an end surface of said substrate [[(1)]].

2. (Currently Amended) The pulse wave measuring apparatus according to claim 1, wherein said air chamber [[(20)]] is provided around an entire perimeter of said substrate [[(1)]].

3. (Currently Amended) The pulse wave measuring apparatus according to claim 1, wherein said air chamber [[(20)]] is open to atmosphere.

4. (Currently Amended) The pulse wave measuring apparatus according to claim 1, further comprising a circuit board [[(26)]] processing a signal, and a flexible line [[(18)]] transmitting a signal output from said ~~pressure sensing means (3)~~ pressure sensor to said circuit board [[(26)]], wherein

said flexible line [[(18)]] includes a fixed portion [[(18a)]] fixed to said protection member [[(12)]], a connection portion [[(18b)]] connected to said substrate [[(1)]], and a loosened loose portion [[(18c)]] located between said fixed portion [[(18a)]] and said connection portion [[(18b)]].

5. (Currently Amended) The pulse wave measuring apparatus according to claim 4, wherein said loosened portion [[(18c)]] is located inside said air chamber [[(20)]].

6. (Currently Amended) The pulse wave measuring apparatus according to claim 1, further comprising a circuit board [[(26)]] processing a signal, and a flexible line [[(18)]] transmitting a signal output from said ~~pressure sensing means~~ (3) pressure sensor to said circuit board [[(26)]], wherein

said flexible line [[(18)]] includes a fixed portion [[(18a)]] fixed to said protection member [[(12)]] and a connection portion [[(18b)]] connected to said substrate [[(1)]], and

a portion [[(18d)]] having rigidity different from that of another portion of said flexible line [[(18)]] is located between said fixed portion [[(18a)]] and said connection portion [[(18c)]] of said flexible line [[(18)]].

7. (Currently Amended) The pulse wave measuring apparatus according to claim 1, further comprising a protection film [[(16)]] covering said main surface of said substrate [[(1)]] and said air chamber [[(20)]], and

an attachment means (42) mechanism configured for fastening a peripheral portion of said protection film [[(16)]] to an outer circumferential wall of said protection member [[(12)]] for attachment.

8. (Currently Amended) The pulse wave measuring apparatus according to claim 7, wherein said protection member [[(12)]] has a substantially circular outer shape when viewed from a direction orthogonal to said main surface of said substrate [[(1)]], and

said attachment means (42) mechanism is an O ring.

9. (Currently Amended) The pulse wave measuring apparatus according to claim 8, wherein said outer circumferential wall of said protection member [[(12)]] has a concave fitting portion [[(47)]] fitting to an inner portion of said O ring [[(42)]] on an entire circumference, and

an outer portion of said O ring [[(42)]] projects from said outer circumferential wall of said protection member [[(12)]].

10. (Currently Amended) The pulse wave measuring apparatus according to claim 7, wherein said protection film [[(16)]] and said attachment ~~means~~ (42) mechanism are integrally formed.

11. (Currently Amended) The pulse wave measuring apparatus according to claim 7, wherein said protection film [[(16)]] has a collar portion [[(16a)]] in said peripheral portion.

12. (Currently Amended) The pulse wave measuring apparatus according to claim 1, wherein said protection member [[(12)]] includes an inner frame body [[(44)]] containing said accommodation space and an outer frame body [[(46)]] fitted to said inner frame body [[(44)]] so as to enclose an outer wall of said inner frame body [[(44)]],

said outer frame body [[(46)]] has a protection film portion [[(46d)]] covering said main surface of said substrate [[(1)]] and said air chamber [[(20)]], and

an outer circumferential wall of said outer frame body [[(46)]] has a projected portion [[(46c)]] on its entire circumference.

13. (Currently Amended) The pulse wave measuring apparatus according to claim 1, further comprising a circuit board [[(26)]] processing a signal, and a flexible line [[(18)]] transmitting a signal output from said ~~pressure-sensing means~~ (3) pressure sensor to said circuit board [[(26)]],

wherein said protection member [[(12)]] includes an inner frame body [[(44)]] containing said accommodation space and an outer frame body [[(46)]] fitted to said inner frame body [[(44)]] so as to enclose an outer wall of said inner frame body [[(44)]], and

said flexible line [[(18)]] is inserted between said inner frame body [[(44)]] and said outer frame body [[(46)]].

14. (Currently Amended) The pulse wave measuring apparatus according to claim 13, wherein said outer frame body [[(46)]] has an overhanging portion [[(46a)]] ~~provided so as to project~~ projecting from an inner surface of said outer frame body [[(46)]] and facing, [[with]] at a

distance, a perimeter of an accommodation space forming surface of said inner frame body [[(44)]] where said accommodation space is formed, and

 said flexible line [[(18)]] inserted between said inner frame body [[(44)]] and said outer frame body [[(46)]] is protected by said overhanging portion [[(46a)]].

15. (Canceled)

16. (Currently Amended) The pulse wave measuring apparatus according to claim [[15]] 1, wherein said protection member [[(12)]] is electrically connected to a ground potential.

17. (Currently Amended) The pulse wave measuring apparatus according to claim 16, further comprising a circuit board [[(26)]] processing a signal, and a flexible line [[(18)]] transmitting a signal output from said ~~pressure-sensing means~~ (3) pressure sensor to said circuit board [[(26)]],

 wherein said protection member [[(12)]] is electrically connected to the ground potential by ~~means of~~ said flexible line [[(18)]].

18. (Currently Amended) The pulse wave measuring apparatus according to claim 1, wherein said protection member [[(12)]] is formed [[with]] of a metal material or a ceramic material.

19. (Currently Amended) The pulse wave measuring apparatus according to claim 1, wherein said protection member [[(12)]] has a plurality of small irregularities on its surface.

20.-29. (Canceled)